



Docket No.: 005916 USA/FPS/MMCS/MC

PATENT/OFFICIAL

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of :  
Young Joseph PAIK :  
Serial No. 09/998,384 : Group Art Unit: 2812  
Filed: November 30, 2001 : Examiner:  
For: FEEDFORWARD AND FEEDBACK CONTROL FOR CONDITIONING OF  
CHEMICAL MECHANICAL POLISHING PAD

**SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT**

Honorable Commissioner for Patents  
Washington, D.C. 20231

Sir:

In accordance with the provisions of 37 C.F.R. 1.56, 1.97 and 1.98, the attention of the Patent and Trademark Office is hereby directed to the documents listed on the attached form PTO-1449. It is respectfully requested that the documents be expressly considered during the prosecution of this application, and that the documents be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

This Information Disclosure Statement is being filed within three months of the U.S. filing date OR before the mailing date of a first Office Action on the merits. No certification or fee is required.

This submission does not constitute a representation that a search has been made or that no better art exists and does not constitute an admission or representation that any of the listed documents is material or constitutes prior art. If it should be determined that any of the listed documents does not constitute prior art under the United States law, Applicants reserve the right

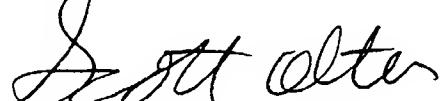
**Serial No. 09/998,384**

to present to the Office the relevant facts and law regarding the appropriate status of such document.

No certification or fee is believed to be required. However, the Commissioner is hereby authorized to charge any additional fees should any be required for this submission, or credit any overpayment to deposit account no. 08-0219.

Respectfully submitted,

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<b>INFORMATION DISCLOSURE CITATION IN AN APPLICATION (PTO-1449)</b>			ATTY. DOCKET NO. 005916 USA/FPS/MMCS/MC	SERIAL NO. 09/998,384		
			APPLICANT Young Joseph PAIK			
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<b>U.S. PATENT DOCUMENTS</b>						
EXAMINER'S INITIALS	PATENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE
	3,205,485	09/07/65	Noltingk			10/21/60
	3,229,198	01/11/66	Libby			09/28/62
	4,000,458	12/28/76	Miller et al.			08/21/75
	4,302,721	11/24/81	Urbanek et al.			05/15/79
	4,750,141	06/07/88	Judell et al.			11/26/85
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	4,938,600	07/03/90	Into			02/09/89
	5,283,141	02/01/94	Yoon et al.			03/05/92
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	2002/0149359	10/17/02	Crouzen et al.			08/18/01	
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	2003/0020909	01/30/03	Adams et al.			04/09/01	
	2003/0020928	01/30/03	Ritzdorf et al.			07/09/01	
	6,517,413	02/11/03	Hu et al.			10/25/00	
<b>FOREIGN PATENT DOCUMENTS</b>						Translation	
EXAMINER'S INITIALS	PATENT NO.	DATE	COUNTRY	CLASS	SUBCLASS	Yes	No
	61-66104	04/04/86	Japan			X	
	3-202710	09/04/91	Japan			X	
	8-23166	01/23/96	Japan			X	
	9-246547	09/19/97	Japan			X	
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	10-34522	02/10/98	Japan			X	
	0 869 652	10/07/98	Europe			X	
	WO 99/09371	02/25/99	WIPO			X	
	0 910 123	04/21/99	Europe			X	
	0 932 194	07/28/99	Europe			X	
	WO 00/00874	01/06/00	WIPO			X	
	2000-183001	06/30/00	Japan			X	
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						<input type="checkbox"/> Yes	<input type="checkbox"/> No
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	WO 01/18623	03/15/01	WIPO			X	
	WO 01/25865	04/12/01	WIPO			X	
	434103	05/16/01	Taiwan			X	
	436383	05/28/01	Taiwan			X	
	455938	09/21/01	Taiwan			X	
	455976	09/21/01	Taiwan			X	
	2001-284299	10/12/01	Japan			X	
	2001-305108	10/31/01	Japan			X	
2002-9030	01/11/02	Japan			X		
WO 02/074491	09/26/02	WIPO			X		
2002-343754	11/29/02	Japan			X		
<b>OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)</b>							
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<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 5%;">1</td> <td>May 1992. "Laser Ablation Endpoint Detector." <i>IBM Technical Disclosure Bulletin</i>, pp. 333-334.</td> </tr> <tr> <td>2</td> <td>Spanos, Costas J., Hai-Fang Guo, Alan Miller, and Joanne Levine-Parrill. November 1992. "Real-Time Statistical Process Control Using Tool Data." <i>IEEE Transactions on Semiconductor Manufacturing</i>, v. 5, n. 4, pp. 308-318.</td> </tr> <tr> <td>3</td> <td>February 1993. "Electroless Plating Scheme to Hermetically Seal Copper Features." <i>IBM Technical Disclosure Bulletin</i>, pp. 405-406.</td> </tr> <tr> <td>4</td> <td>Scarr, J. M. and J. K. Zelisse. April 1993. "New Topology for Thickness Monitoring Eddy Current Sensors (Abstract)." <i>Proceedings of the 36<sup>th</sup> Annual Technical Conference</i>, Dallas, Texas.</td> </tr> <tr> <td>5</td> <td>Matsuyama, Akira and Jessi Niou. 1993. 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"Recipe-Controlled Operation of Batch Processes with Batch X." <i>ATP Automatisierungstechnische Praxis</i>, vol. 36, no. 3, pp. 43-51.</td> </tr> <tr> <td>10</td> <td>Stoddard, K., P. Crouch, M. Kozicki, and K. Tsakalis. June-July 1994. "Application of Feedforward and Adaptive Feedback Control to Semiconductor Device Manufacturing (Abstract)." <i>Proceedings of 1994 American Control Conference - ACC '94</i>, vol. 1, pp. 892-896. Baltimore, Maryland.</td> </tr> <tr> <td>11</td> <td>Schaper, C. D., M. M. Moslehi, K. C. Saraswat, and T. Kailath. November 1994. "Modeling, Identification, and Control of Rapid Thermal Processing Systems (Abstract)." <i>Journal of the Electrochemical Society</i>, vol. 141, no. 11, pp. 3200-3209.</td> </tr> <tr> <td>12</td> <td>Tao, K. M., R. L. Kosut, M. Ekblad, and G. Aral. December 1994. 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EXAMINER		DATE CONSIDERED	

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